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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/079,692	02/20/2002	William D. Hays JR.	60,130-817; 00MRA0208/022	7399
26096	7590	02/19/2004	EXAMINER	
KRAMER, DEVON C				
CARLSON, GASKEY & OLDS, P.C. 400 WEST MAPLE ROAD SUITE 350 BIRMINGHAM, MI 48009			ART UNIT	PAPER NUMBER
			3683	

DATE MAILED: 02/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/079,692

Applicant(s)

HAYS ET AL.

Examiner

Devon C Kramer

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-- **The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 January 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) 2, 10-17 and 27 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 3-9 18-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1) The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2) Claims 1 and 18 are rejected under 35 U.S.C. 102(b) as being anticipated by Grimme et al (DE 29821482).

Please note that Grimme et al (US 6267206) is an equivalent to the German application. In reference to claim 1, Grimme et al teaches a brake plate (10) comprising a non-metallic body (see abstract) where the friction pad has a first surface and an oppositely facing second surface, the backing plate (10), contacting only the second surface of the friction pad. Please note that the side member (12) is not considered part of the backing plate.

In reference to claim 18, Grimme et al teaches the use of a thermosetting resin.
(Col. 2 lines 36-40)

Claim Rejections - 35 USC § 103

3) The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4) Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Grimme et al (DE 29821482) in view of Stahl (4552252).

Grimme et al teaches a non-metallic backing plate, but lacks the teaching of applying the friction lining with adhesive.

Stahl teaches applying a friction lining to a backing plate using an adhesive. (Col. 3 lines 15-30).

It would have been obvious to one of ordinary skill in the art at the time of the invention to have connected the plate and pad of Grimme et al with adhesive as taught by Stahl merely because adhesive is a commonly known way to attach the two parts together which is durable and cost effective and an adhesive would further bond the friction material to the carrier plate.

5) Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Grimme et al (DE 29821482) in view of Kwolek (5515950).

Grimme et al lacks the teaching of riveting the friction pad to the plate.

Kwolek teaches riveting the friction pad to the plate.

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It would have been obvious to one of ordinary skill in the art at the time of the invention to have provided the pad assembly of Grimme et al with riveting as taught by Kwolek merely because riveting is a known alternate means used in the art to secure a brake pad to a backing plate and would further ensure that the pad of Grimme et al would stay attached to the carrier plate.

6) Claims 5 and 20-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Grimme et al (DE 29821482) in view of Strasser et al (6062351).

Grimme et al lacks the teaching of integrally molding the backing plate and the pad.

Strasser et al teaches integrally molding a portion of the backing plate and the friction pad, with the surface having a plurality of projections (46).

It would have been obvious to one of ordinary skill in the art at the time of the invention to have provided the pad assembly of Grimme et al with the molding as taught by Strasser merely because molding is a known alternate means used in the art to secure a brake pad to a backing plate which is durable and cost effective.

7) Claims 6, 8 and 23-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Grimme et al (DE 29821482) in view of Kearsy (5585166).

Grimme et al provides a body 20 having a friction surface (20a) that is the same material as the body. Grimme et al teaches a phenolic matrix material used in the body

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(Please see the US equivalent col. 2 lines 36-40) Grimme et al is silent to using his pad in a wet disc brake assembly.

Kearsey teaches the use of a friction material in a wet disc assembly.

It would have been obvious to one of ordinary skill in the art at the time of the invention to have provided the pad of Grimme et al in a wet disc brake as taught by Kearsey merely because it is an alternate environment where friction pads are known to be used.

8) Claims 7 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Grimme et al (DE 29821482) in view of Kearsey (5585166) as applied to claim 6 and 24 above and further in view of Ohya et al (4944373).

Both Grimme et al and Kearsey lack the teaching of a fiber reinforced phenolic material.

Ohya et al teaches the use of a fiber-reinforced material for a backing plate. (Col. 7 lines 47-50)

It would have been obvious to one of ordinary skill in the art at the time of the invention to have provided the pad assembly of Grimme et al as modified by Kearsey with a fiber reinforced material as taught by Ohya et al in order to add further durability and strength to the pad assembly.

9) Claims 9 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Grimme et al (DE 29821482) in view of Ohya et al (4944373).

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Grimme et al lacks the teaching of a fiber reinforced phenolic material.

Ohya et al teaches the use of a fiber-reinforced material for a backing plate. (Col. 7 lines 47-50)

It would have been obvious to one of ordinary skill in the art at the time of the invention to have provided the friction lining of Grimme et al with a fiber reinforced material as taught by Ohya et al in order to add further durability and strength to the pad assembly.

10) Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Grimme et al (DE 29821482) in view of Strasser et al (6062351) as applied to claim 24 above and further in view of Lam (6182804).

Both Grimme et al and Strasser et al lack the teaching of a body and a friction surface comprising a fiber reinforced phenolic material.

Lam teaches a friction material formed of a fiber reinforced phenolic material.
(Abstract)

It would have been obvious to one of ordinary skill in the art at the time of the invention to have provided the body and friction lining of Grimme et al as modified by Strasser with a fiber reinforced phenolic material as taught by Lam merely because it is a known tribologic material that has good friction and wear characteristics.

Response to Arguments

11) Applicant's arguments filed Jan 2, 2004 have been fully considered but they are not persuasive. Grimme et al discloses a carrier plate that contacts a second surface of

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a brake and a side member that contact a first surface. Please note that the carrier plate (10) only contacts the second surface. Applicant states that there is no benefit or motivation to making the combination of Grimme et al and Stahl or Grimme et al and Kwolek. Adhesive or rivets can be added to further secure the pad to the carrier plate. IN reference to the rejection of Grimme et al in view of Kearsey, applicant states that none of the references teach a material that has the same material throughout. Please note that Grimme et al has a friction lining that has the same material throughout.

Conclusion

12) THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

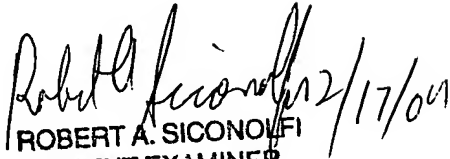
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13) Any inquiry concerning this communication or earlier communications from the examiner should be directed to Devon C Kramer whose telephone number is 703-305-0839. The examiner can normally be reached on Mon-Fri 8-4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Lavinder can be reached on 703-308-3421. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-3519 for regular communications and 703-308-3519 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1134.

DK
February 12, 2004


ROBERT A. SICONOLFI
PATENT EXAMINER